



HELLENIC REPUBLIC



HELLENIC STATISTICAL AUTHORITY

Piraeus, November 13, 2014

## PRESS RELEASE

### LABOUR FORCE SURVEY: August 2014

The Hellenic Statistical Authority announces the seasonally adjusted unemployment rate for August 2014.

In the context of the program undertaken by ELSTAT for the improvement of dissemination and presentation of statistics, and in order to harmonize the presentation of monthly unemployment rate estimates with the presentation of monthly estimates provided by Eurostat, ELSTAT, since January 2012, announces the monthly results of the LFS seasonally adjusted, for persons 15 – 74 years old. Unadjusted data are still available on ELSTAT's website.

Seasonal adjustment is a statistical method that has as target to remove the influence of seasonal components from the survey estimates, in order to reveal the underlying trend in labour market.

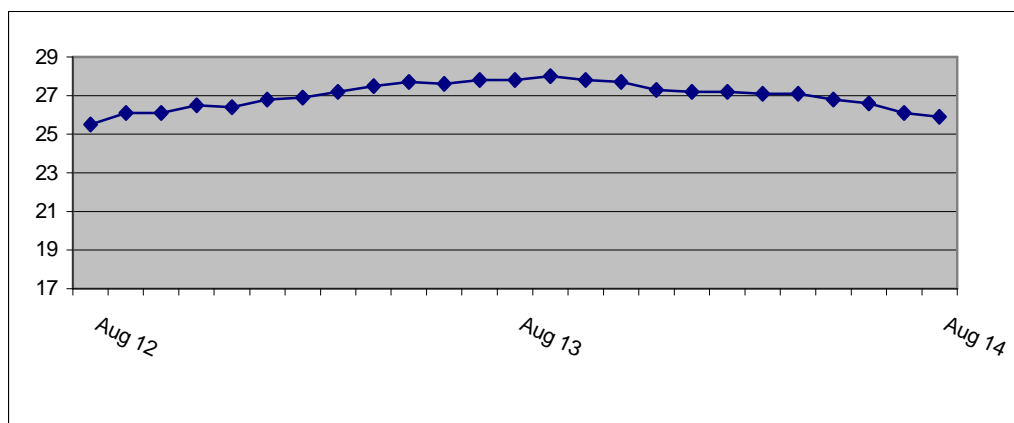
The seasonally adjusted unemployment rate in August 2014 was 25.9% compared to 27.8% in August 2013 and 26.1% in July 2014. The seasonally adjusted number of employed amounted to 3,551,148 persons. The seasonally adjusted number of unemployed amounted to 1,242,219 while the seasonally adjusted number of inactive to 3,334,759. The corresponding figures for August 2009 to 2014 are presented in Table 1.

The number of employed increased by 32,636 persons compared with August 2013 (a 0.9% rate of increase) and decreased by 15,698 persons compared with July 2014 (a 0.4% rate of decrease).

The number of unemployed decreased by 112,186 persons (a 8.3% rate of decrease) compared with August 2013 and by 20,398 persons compared with July 2014 (a 1.6% rate of decrease).

The number of inactive persons –that is, persons that neither worked neither looked for a job– increased by 29,196 persons (a 0.9% rate of increase) compared with August 2013 and by 31,709 persons compared with July 2014 (a 1.0% rate of increase).

#### Seasonally adjusted unemployment rate by month (August 2012 – August 2014)



Contact Person: Stelios Zachariou  
Tel: 213 135 2173  
Fax: 213 135 2948  
E-mail : [lhs@statistics.gr](mailto:lhs@statistics.gr)  
<http://www.statistics.gr>

Tables 2 and 3 illustrate seasonally adjusted unemployment rate by gender and age groups from August 2009 to 2014. Table 4 presents the evolution of seasonally adjusted unemployment rate during last 12 months by Decentralized Administrations. The complete time series for employed, unemployed and inactive are available on ELSTAT's website.

**Table 1. Seasonally adjusted estimates for the number of employed, unemployed, economically non-active and unemployment rate: August 2009-2014**

	August					
	2009	2010	2011	2012	2013	2014
Employed	4,570,415	4,393,086	4,016,274	3,660,240	3,518,511	3,551,148
Unemployed	489,543	649,705	913,809	1,254,446	1,354,405	1,242,219
Inactive	3,366,466	3,313,889	3,372,260	3,321,226	3,305,562	3,334,759
<b>Unemployment Rate</b>	<b>9.7</b>	<b>12.9</b>	<b>18.5</b>	<b>25.5</b>	<b>27.8</b>	<b>25.9</b>

**Table 2. Seasonally adjusted unemployment rate by gender: August 2009-2014**

Gender	August					
	2009	2010	2011	2012	2013	2014
Males	7.1	10.2	15.8	22.7	24.6	23.1
Females	13.2	16.4	22.2	29.2	32.0	29.5
<b>Total</b>	<b>9.7</b>	<b>12.9</b>	<b>18.5</b>	<b>25.5</b>	<b>27.8</b>	<b>25.9</b>

**Table 3: Seasonally adjusted unemployment rate by age groups: August 2009-2014<sup>1</sup>**

Age Group	August					
	2009	2010	2011	2012	2013	2014
15-24 years old	25.3	32.6	46.1	56.8	58.6	49.3
25-34 »	12.3	17.1	26.0	33.1	37.7	32.7
35-44 »	8.0	10.9	15.2	21.9	24.0	22.5
45-54 »	6.6	8.8	12.9	18.8	20.7	20.2
55-64 »	4.7	5.9	8.2	14.3	15.8	16.6
65-74 »	1.0	1.8	5.5	4.8	8.9	13.5
<b>Total</b>	<b>9.7</b>	<b>12.9</b>	<b>18.5</b>	<b>25.5</b>	<b>27.8</b>	<b>25.9</b>

<sup>1</sup> Estimates of "rare" characteristics, that is estimates of characteristics that refer to 10.000 persons or less, are accompanied by large sampling errors, as for example in the case of unemployment rate in the age group of 65 – 74 years old

**Table 4. Seasonally adjusted Unemployment rate during August 2014 and the last 12 months, by Decentralized Administration<sup>1</sup>**

Decentralized Administration	Period												
	2013					2014							
	8th	9th	10th	11th	12th	1st	2nd	3rd	4th	5th	6th	7th	8th
Macedonia-Thrace	29.6	30.1	29.5	29.9	29.2	28.2	28.1	28.5	28.6	27.5	27.4	27.1	27.0
Epirus-Western Macedonia	29.5	28.9	28.9	28.0	30.1	27.9	28.6	28.3	28.1	27.6	27.2	26.7	26.6
Thessaly – Sterea Ellas	26.7	26.7	26.7	27.6	26.4	26.3	26.3	26.5	26.2	26.5	25.9	25.6	24.4
Peloponnese. Western Greece and Ionian Islands	25.4	25.3	25.4	24.8	26.5	25.7	25.9	25.8	26.3	25.8	25.8	25.6	25.4
Attica	28.4	29.1	28.9	28.9	28.3	28.1	28.1	28.0	28.2	27.3	27.1	26.9	26.9
Aegean	22.8	22.0	24.2	23.3	21.2	25.6	24.0	22.0	23.3	21.1	17.2	19.7	20.2
Crete	28.1	24.8	25.4	26.1	23.7	22.9	23.6	24.4	21.7	23.3	26.0	23.5	22.9
<b>Greece. Total</b>	<b>27.8</b>	<b>28.0</b>	<b>27.8</b>	<b>27.7</b>	<b>27.3</b>	<b>27.2</b>	<b>27.2</b>	<b>27.1</b>	<b>27.1</b>	<b>26.8</b>	<b>26.6</b>	<b>26.1</b>	<b>25.9</b>

<sup>1</sup>Decentralized Administrations are the lowest geographical areas for which Labour Force Survey publishes estimates. LFS results are not published at lower level (NUTS II – “Perifereiakes Enotites” or NUTS III – “Perifereies”) because, due to small population and sample size, estimates in these areas have large sampling errors. We should note that the same problem of small populations and sample sizes exist also in certain Decentralized Administrations and as a result, estimates in these areas have large sampling errors

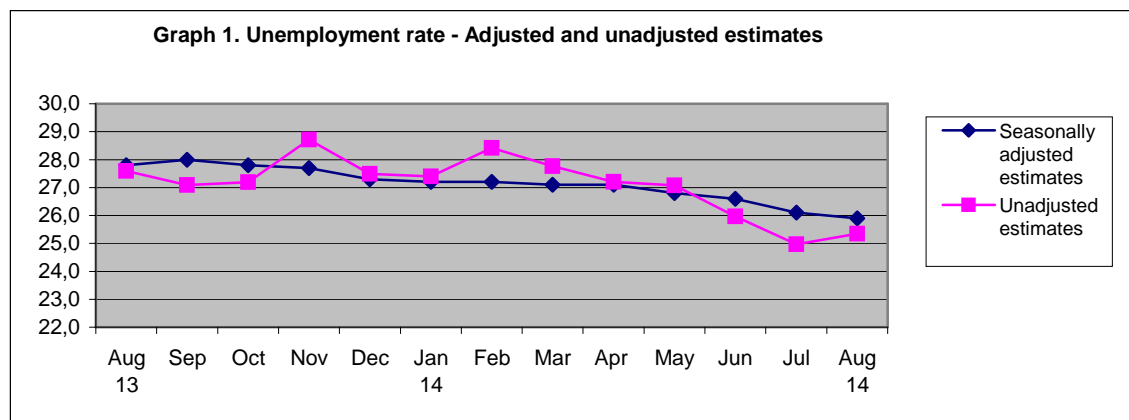
#### The effect of seasonal adjustment on the estimates of Labour Force Survey

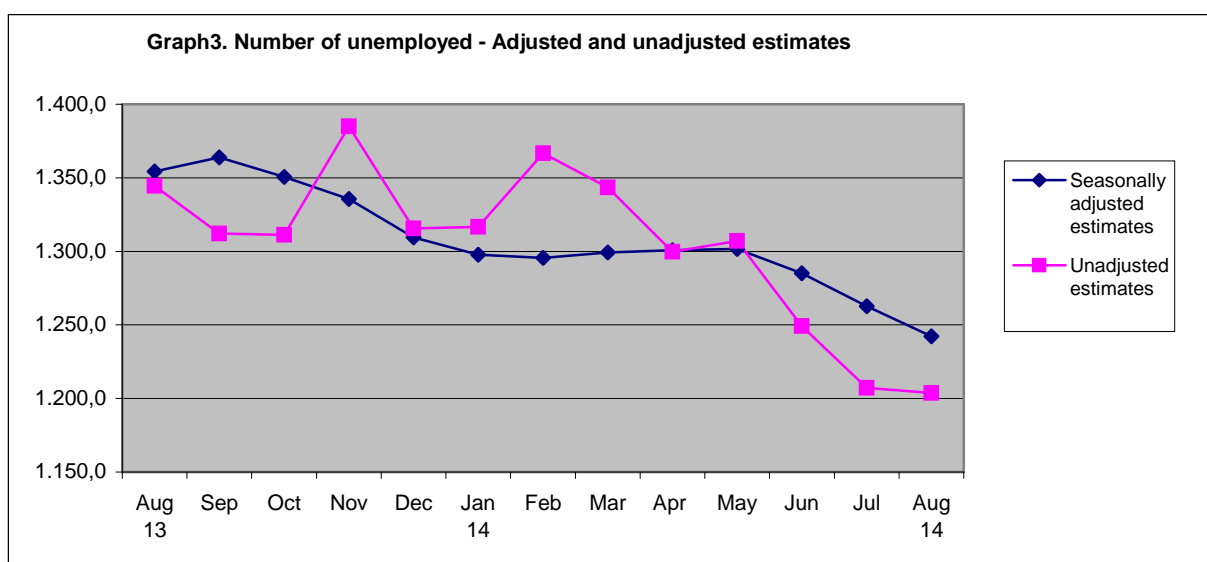
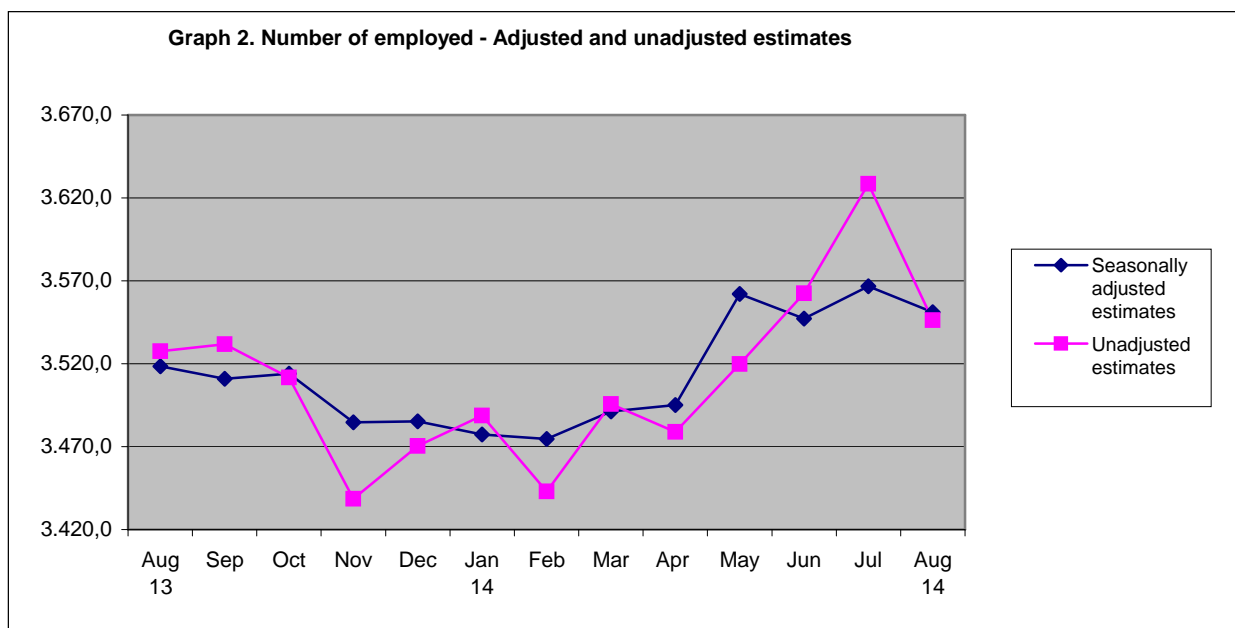
The characteristics surveyed by Labour Force Survey – number of employed, unemployed, etc.– have large seasonal variation: for example, in Greece, employment increases during summer because of tourism (if there are no other countervailing factors).

Seasonal adjustment is a statistical technique that removes the seasonal component of a time series, making more visible the underlying trend in the change of a characteristic.

Eurostat is publishing seasonally adjusted monthly results since 2000. These results are based either solely in Labour Force Survey results either in estimations that are based in the most recent results of the Labour Force Survey and in registered unemployment.

The following graphs (Graph 1 – 3) present adjusted and unadjusted time series for employed, unemployed and rate of unemployment for the period August 2013 – August 2014, while Table 5 presents, for the same period, the change in monthly estimates of employed and unemployed because of seasonal adjustment.





**Table 5. Change in monthly estimates of employed and unemployed because of seasonal adjustment**

	Estimated number of employed without seasonal adjustment (in thousands)	Change due to seasonal adjustment (in thousands)	% of change	Estimated number of unemployed without seasonal adjustment (in thousands)	Change due to seasonal adjustment (in thousands)	% of change
August 2013	3.527,4	-8,9	-0,3%	1.344,5	9,9	0,7%
September	3.531,8	-20,9	-0,6%	1.312,2	51,7	3,9%
October	3.511,6	2,5	0,1%	1.311,2	39,5	3,0%
November	3.438,6	46,0	1,3%	1.384,9	-49,2	-3,6%
December	3.470,4	14,9	0,4%	1.315,5	-6,0	-0,5%
January 2014	3.488,8	-11,4	-0,3%	1.316,7	-19,0	-1,4%
February	3.442,9	31,7	0,9%	1.366,7	-71,1	-5,2%
March	3.495,6	-4,4	-0,1%	1.343,4	-44,2	-3,3%
April	3.478,9	16,2	0,5%	1.299,8	1,0	0,1%
May	3.519,7	42,3	1,2%	1.307,2	-5,5	-0,4%
June	3.562,5	-15,3	-0,4%	1.249,2	36,0	2,9%
July	3.628,5	-61,7	-1,7%	1.207,3	55,3	4,6%
August 2014	3.546,3	4,8	0,1%	1.203,8	38,4	3,2%

## EXPLANATORY NOTES

<b>Labour Force Survey</b>	Labour Force Survey produces estimates since 1981 (second quarter of the year). From 1998 onwards it is a continuous quarterly survey. The main statistical objectives of the Labour Force Survey is to divide the population of working age (15 years and over) into three mutually exclusive and exhaustive groups - persons in employment, unemployed persons and inactive persons. In addition, the Labour Force Survey collects information on demographic characteristics, on main job characteristics, on the existence and characteristics of a second job, on educational attainment, on participation in education, on previous working experience and on search of job.
<b>Legislation</b>	The current survey is completely harmonized with European legislation. The principal legal act is the <u>Council Regulation (EC) No. 577/98</u> that stipulates the provisions on design, survey characteristics and decision-making processes.
<b>Reference Period</b>	The sample of Labour Force Survey is equally allocated to the 4 (or 5) weeks of the month. Every selected household is assigned to a specific week, the reference week, running from Monday to Sunday.
<b>Coverage</b>	For the monthly estimates, a sub-sample of the quarterly Labour Force survey's sample was used.
<b>Definitions</b>	<p><b>Employed</b> are persons aged 15 years or older, who during the reference week worked, even for just one hour, for pay or profit or they were working in the family business, or they were not at work but had a job or business from which they were temporarily absent.</p> <p><b>Unemployed</b> are persons aged 15-74 who were without work during the reference week (they were not classified as employed), were currently available for work and were either actively seeking work in the past four weeks or had already found a job to start within the next three months.</p> <p><b>Inactive</b> are those persons who are neither classified as employed nor as unemployed.</p> <p><b>Economically active population (labour force)</b> are persons either employed or unemployed.</p>
<b>Seasonal adjustment</b>	Seasonal adjustment is a statistical technique that removes the seasonal component of a time series, making more visible the underlying trend in the change of a characteristic. Hellenic Statistical Authority is using Demetra 2.0 for seasonal adjustment. Seasonally adjusted series are produced by TRAMO&SEATS algorithm. We note that due to seasonal adjustment, the whole series with monthly estimates is recalculated every time a new month is added in time series. As a result, estimations for the previous months are often revised.
<b>Sampling errors</b>	The monthly results of Labour Force Survey are estimations that are based in a relatively small sample size and have large sampling errors. As an indication of the magnitude of survey's sampling errors, we note that estimations of characteristics that refer to 25.000 persons at the total country, are accompanied by a coefficient of variation of at least 15% (an analysis of Labour Force Survey sampling errors can be found at the address <a href="http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0101">http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0101</a> at the link "Methodology"). More accurate estimates and detailed analysis of the changes in employment can be based on the quarterly results of the survey.
<b>Methodology</b>	Labour Force Survey's estimates are produced by a suitable unbiased estimator which takes in to account a) the probability of selection of every sampled household, b) the response rate in every primary sampling unit, c) the estimated population, for the corresponding month, allocated by NUTS II areas, gender and age group).
<b>References</b>	Analytical description of the Labour Force Survey's methodology and definitions can be found at <a href="http://www.statistics.gr">www.statistics.gr</a> .